20

5

## What is claimed is:

- 1. A massage machine for giving massage by therapeutic members to the person to be massaged, the massage machine being useful for health care and comprising a living body information sensor for detecting living body information of the autonomic nervous system of the person, means for judging the psychological state of the person based on the living body information detected, and means for holding histories of psychological states of persons to be massaged.
  - 2. A massage machine for health care according to claim 1 wherein the living body information sensor includes one or a plurality of sensors selected from among a galvanic skin response sensor, a pulse sensor and a skin temperature sensor.
- 3. A massage machine for health care according to claim 15 2 wherein when the living body information sensor comprises the galvanic skin response sensor, the psychological state judging means interprets an impaired galvanic skin response as indicating a relaxed state, and a higher galvanic skin response as indicating a tense state.
  - 4. A massage machine for health care according to claim 2 wherein when the living body information sensor comprises the pulse sensor, the psychological state judging means interprets a reduced pulse rate as indicating a relaxed state,

15

20

and an increased pulse rate as indicating a tense state.

- 5. A massage machine for health care according to claim
  2 wherein when the living body information sensor comprises
  the skin temperature sensor, the psychological state judging
  means interprets a rise in the skin temperature as indicating
  a relaxed state, and a drop in the skin temperature as
  indicating a tense state.
- 6. A massage machine for health care according to claim 2 wherein the psychological state judging means judges the level of activity of the person in accordance with variations in at least one item of living body information selected from among galvanic skin response, pulse rate and skin temperature, and interprets low activity as indicating a relaxed state and high activity as indicating a tense state.
- 7. A massage machine for health care according to claim 1 wherein the history holding means comprises means for counting the frequency with which the person is judged to be in a tense state when massaged at each of different body parts, and the count obtained by the counting means is held as a history of psychological state.
- 8. A massage machine for health care according to claim
  7 which comprises means for displaying variations in the
  count involved in massaging particular one of the body parts.

O The first party that have the first party that th

15

20

9. A physiological quantity measuring circuit for detecting a physiological quantity of the person to be massaged by a physiological quantity sensor and controlling the massage operation of the machine based on variations in the physiological quantity, the measuring circuit comprising a physiological quantity detection circuit having the sensor connected thereto, and a signal processing circuit for producing physiological quantity data based on a physiological quantity signal obtained from the detection circuit, the physiological quantity detection circuit comprising a plurality of signal converters each adapted to receive the physiological quantity as an input signal and deliver the detection signal as an output signal, the signal converters exhibiting different kinds of signal conversion characteristics which are different in the relationship of the output signal with the input signal, the different kinds of signal conversion characteristics overlapping each other in the range of input signals to be processed by the converter, the signal processing circuit being operable to produce a series of items of physiological quantity data in the process of giving the same massage to the same body part based only on physiological quantity detection signals resulting from one of the different kinds of signal

A probability of the probability

15

20

5

conversion characteristics of the detection circuit when said resulting detection signals are all included within an effective output range of said one kind of signal conversion characteristics, or to produce a series of items of physiological quantity data in the process based on physiological quantity detection signals resulting from one kind of or the different kinds of signal conversion characteristics when otherwise.

- 10. A physiological quantity measuring circuit according to claim 9 wherein the physiological quantity sensor is a skin temperature sensor for measuring skin temperature, and the physiological quantity detection circuit has two kinds of signal conversion characteristics respectively for low temperatures and high temperatures which partly overlap each other in the temperature range to be measured.
- 11. A physiological quantity measuring circuit according to claim 10 wherein the signal processing circuit produces a series of items of skin temperature data in the process of giving the same massage to the same body part based only on physiological quantity detection signals resulting from the low-temperature signal conversion characteristics when said resulting detection signals are all included within the

15

20

5

effective output range of the low-temperature signal conversion characteristics, or to produce a series of items of skin temperature data in the process based on physiological quantity detection signals resulting from the two kinds of signal conversion characteristics for high and low temperatures when otherwise.

- 12. A physiological quantity measuring circuit according to claim 9 wherein the physiological quantity sensor is a perspiration quantity sensor for measuring the resistance value between a pair of electrodes, and the physiological quantity detection circuit has two kinds of signal conversion characteristics respectively of low gain and high gain which overlap each other in the range of resistance values to be measured.
- 13. A physiological quantity measuring circuit according to claim 12 wherein the signal processing circuit produces a series of items of perspiration quantity data in the process of giving the same massage to the same body part based only on physiological quantity detection signals resulting from the high-gain signal conversion characteristics when said resulting detection signals are all included within the effective output range of the high-gain signal conversion characteristics, or to produce a series of items of

perspiration quantity data in the process based on physiological quantity detection signals resulting from the low-gain signal conversion characteristics when otherwise.